Paper/Work
LLNL Postdoc Association Newsletter
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Balancing Work and Family: Postdocs with Kids Make It Happen at LLNL

By David Martinez

Of the many challenges that are faced by postdocs at LLNL, one of the most difficult might be balancing time working and time with their family, especially with children. Postdocs often find themselves working late trying to finish a presentation for tomorrow's meeting, analyzing data for a paper, or trying to squeeze in that extra project, while their kids wait, deservingly and often impatiently, for their turn for attention. This is a common situation with working parents, especially those in demanding technical careers, and it can be hard to find the proper balance. Consequently, discovering how to find this balance between work and family may be one of the most important things a postdoc learns. As a postdoc in NIF who is also a parent, I want to share my thoughts on the matter. To get a fuller picture of the issues, I interviewed three of my fellow postdocs who are also parents to learn how they balance work and family.

One issue that postdoc parents may face is irregular hours. Frequently dinners are missed and bedtime stories go unread. Even when at home the postdoc parent will often have work that needs to be done. I know from personal experience that extra take-home work often suffers when that cute face asks for one more story or one more song. Balancing work and children becomes a tightrope walk where there is a screaming two year old hanging from one side of your balancing pole and a stack of research on the other. Prioritizing, planning and time management all help ensure quality time is spent even when quantity time isn't available. Tammy Olson, a postdoc in the Chemical Sciences Division and the mother of a one-year-old daughter, suggests becoming more efficient by outlining your goals for the day. This becomes especially important if the child is in day care and has to be picked up at a specific time.

In addition to irregular hours a postdoc must often venture out into the world for conferences, collaboration activities, or experiments. This can be especially difficult when leaving one's family behind at home. To address this challenge some postdoc parents take their loved ones with them, especially when their official business travel takes them near friends or family. This reduces the stress of not being able to be there for the important bedtime stories and kisses and has the added bonus of giving the little ones adventures that they can't experience at home. Unfortunately, this is a very costly solution, especially with a large family, and is clearly impractical when traveling often. The stress of traveling away from home can be reduced by planning ahead and communicating with one's significant other to help the travel days go more smoothly. Having itineraries and contact information available at home,

Balancing Work and Family, continued

including phone numbers for hotels and other locations for those times when cell phones are unavailable, makes all parties feel more secure. Getting family or friends to help out at home will also ease the stress on the parent who stays behind.

In this modern age it is not uncommon for a family to have both parents working and the question of who is going to take care of the kids on a regular basis has to be answered. Fortunately, the Lab sponsors a daycare service for parents. Adrian Prantl, a postdoc in the Center for Applied Scientific Computing, and Andrea Schmidt, a postdoc working in the National Security Engineering Division, both find the Lab's daycare to be a great place for their children. There is a good child to teacher ratio so parents can usually find their kids interacting directly with a teacher. Even kids love it: Adrian's two year old daughter often looks forward to spending time at the Lab's daycare. However, any paid daycare tends to be expensive, especially for newborns. For example, the Lab's daycare charges $1900 per month for newborn care. Tammy Olson decided that in-home child care (which costs her about $800 a month) was a better fit for her family because of the lower cost and the added convenience.

From the perspective of a parent seeking stability, one major disadvantage of being a postdoc anywhere is that the job is only temporary. For example, historically around 50% of postdocs at the Lab have stayed for a staff position while the rest have gone on to pursue different venues for their career. Job hunting, relocation and the associated transitions can be very challenging for parents, but it is still important for a parent to plan ahead and keep their family in mind when looking for a job. Andrea Schmidt, mother of two boys ages 4 and 2, was a parent before becoming a postdoc at the Lab. She said that she specifically chose a job at LLNL because she finds that it "has a great work life balance." Andrea also looked for projects that did not require frequent travel. This kind of foresight and planning will help a postdoc with a family find a suitable job.

The stresses of working and looking after children can become frustrating and often times the best thing to do is talk to someone who has had similar experiences. Fortunately, there are many parenting groups available that offer support and information. At LLNL there is a Lawrence Livermore Women's Association (LLLWA) New Moms Support Group Lunch that meets Thursdays at noon on the first full week of each month. More information can be found at https://lllwa.llnl.gov/moms.html. This group focuses on topics of interest and support for moms with children under the age of five. Additionally, this support group can be found on LabBook (under the name "New Mom's Support Group") where new moms can share their experiences and offer their support and advice to other parents. There are also numerous groups outside the lab, such as the Livermore Moms group that Tammy Olson finds to be very helpful. Livermore Moms has over 300 members, and the group supports new families by providing information on local pediatric and childcare services and creating meal plans for new moms. Other groups can be found on Facebook and Meetup.com. All of these groups are a great way meet other parents and to learn from their experiences to help cope with the challenges of balancing work and children.

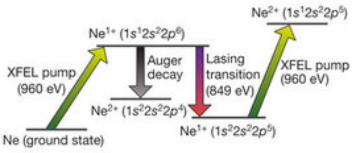
It is also important to point out that many supervisors here at LLNL are supportive of their employees with children. This is true in my case and for all of the postdocs who I interviewed. Hectic work schedules and traveling make it hard to balance work and family, but by planning ahead and utilizing readily available support groups LLNL postdocs make it happen, leaving both family and supervisor happy with the result.

Judges Needed for the Livermore Valley Science Odyssey

Help local K-12 kids by evaluating their science projects! February 29th – March 1st at Junction Avenue School. Contact Ms. Frankie Tate at Granada High School for more information or to volunteer:
ftate@lvjusd.k12.ca.us

Postdoc-Related Highlights from Notes to the Director

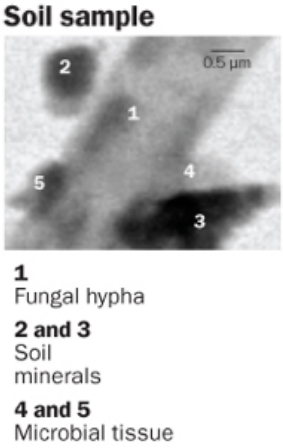
Short, pure X-ray Laser pulses



LLNL physicist (and former LLNL postdoc) **Félicie Albert** was a key member of an LLNL-led team that developed a new atomic x-ray laser capable of creating the purest (highest spectral brightness with full temporal coherence) x- ray laser pulses yet achieved. Félicie, an expert in ultrafast x- ray sources and laser-plasma interactions, was recruited by former LLNL physicist (and former LLNL postdoc) **Nina Rohringer** to help design and conduct the experiment at the Linac Coherent Light Source (LCLS) at the Stanford Linear Accelerator Center (SLAC). The femtosecond (10^{-15} second)-long high-intensity x-ray pulses were of much shorter wavelength and greater brilliance than had been achieved with previous atomic x-ray lasers. The research was reported in the January 26 issue of the journal Nature. "Nina was the theoretician who conceived of the experiment," Félicie said. "We met at a **postdoc poster session** at LLNL and chatted about our respective work. She already had the project in mind and asked me to join, and I of course said yes. It's a once-in-a-lifetime opportunity to work with the LCLS. An atomic x-ray laser like this produces extremely pure monochromatic light in the x-ray regime that can be used for things like watching phase transitions in action or doing nonlinear x-ray studies," she said.

Nina Rohringer *et al*, Nature 481, 488–491 (26 January 2012)

Research on soil carbon and nitrogen cycling in *Science News*



Work conducted at LLNL by Jennifer Pett-Ridge, Marco Keiluweit (LLNL Lawrence Scholar and a graduate student at Oregon State University), LLNL postdoc **Jeremy Bougoure**, and Peter Weber (all from the Chemical Sciences Division) using high resolution imaging mass spectroscopy (NanoSIMS) to investigate the biogeochemical cycling of carbon and nitrogen in soil was highlighted in an article entitled 'Soil's Hidden Secrets', published in the January 28, 2012 edition of Science News. In collaboration with Oregon State University and the Lawrence Berkeley National Laboratory, the LLNL team demonstrated a new way to visualize the incorporation of 13C- and 15N-labeled microbial cell residues onto the minerals in soil, and thus to better understand the dynamics of soil organic matter turnover. In the image featured in *Science News*, a fungal hypha sits amidst soil minerals and microbial tissues. The correlated 15N and Fe ion images suggest that nitrogen from fungal cell walls is digested by microbes and preferentially deposited on the surfaces of iron oxide minerals or coatings.

www.sciencenews.org/view/feature/id/337548

Sonia Wharton to serve on team drafting Energy Production Statement

LLNL researcher (and former LLNL postdoc) **Sonia Wharton** has been chosen to serve on the team charged with drafting the American Meteorological Society's (AMS) policy statement on Energy Production and Earth Observations, Science, and Services (Earth OSS). The energy industry is highly dependent on Earth OSS, particularly those services that provide weather and climate information. Accurate predictions of summer heat and winter cold help utilities predict consumer demands for energy and avoid blackouts and heating fuel shortages. Renewable energy sources (e.g., onshore/offshore wind, solar, hydro) are particularly dependent on Earth OSS because of their direct dependence on conditions such as cloud cover, wind speed, and water availability. As a result, there is great need for increased understanding of the connection between Earth OSS and energy production. The AMS policy statement is intended to: 1) increase awareness among policy makers of the importance of Earth OSS to the energy sector; 2) identify potential policy options at the interface of Energy and Earth OSS; 3) describe potential advantages and disadvantages of these policy options; and 4) compare the roles of Earth OSS to conventional and renewable energy production.

Professional & Career Development

8 Key Points for Perfect Presentation Practice.

1. Practice out loud.
2. Practice with variety.
3. Be aware of timing.
4. Practice in front of a real audience.
5. Incorporate spontaneous Q&A.
6. Spend more time on the opening and closing.
7. Practice your timing.
8. Practice by recording yourself.

"Spontaneity is an infinite number of rehearsed possibilities." —Peter Drucker

Read more:
sixminutes.dlugan.com/presentation-practice

Upcoming Events

Postdoc Lunch
Friday, February 24 at 11:45 AM (early to beat the rush)
Taqueria Consuelito, Vasco Road & Las Positas Road
Hosted by Nathan Kugland


Photo from Yelp

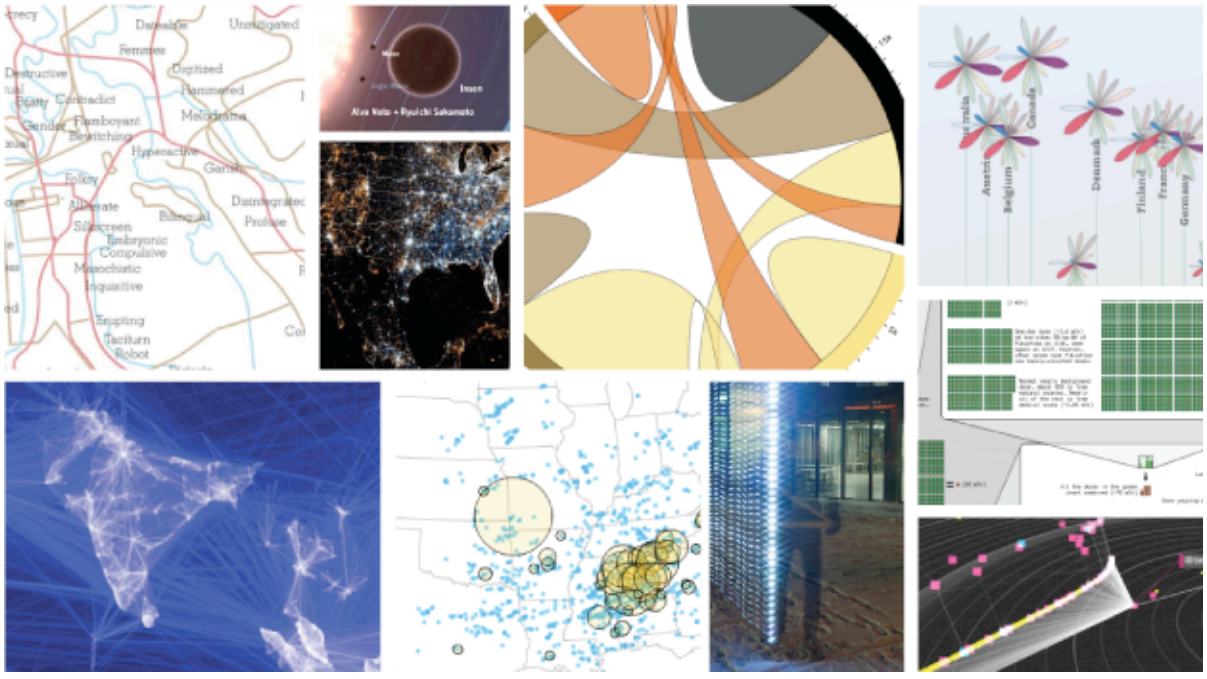
Physics & Life Sciences Postdoc Research Seminar
Tuesday, March 6, 11 AM
B151 R1209 (Stevenson Room). Refreshments served.
• Robert Casperson
• Michael Schneider "Dark Energy Observations with the Large Synoptic Survey Telescope"

Conflict Resolution Brownbag Seminar at Sandia
Wednesday, February 29, 11:00 AM – 12:30 PM
Sandia B905 R210 (open campus area for US citizens)
"Strategies for Conflict Management: The 'I' of the Storm," presented by Reese Ramos, Sandia Ombudsman.
RSVP to Heather Jackson, hfjacks@sandia.gov
(Foreign nationals must coordinate access with Heather)

In Other News… "Flowing Data"

Data visualization, infographics, and statistics made beautiful. See more at flowingdata.com.

"The Best Data Visualization Projects of 2011"



Selected Recent Research Publications by LLNL Postdocs

Bold = LLNL Postdoc. *Broadcast your achievements! Make new connections & help show how we are doing collectively.*
Guidelines: 1) Peer-reviewed publications only, nothing in progress; 2) Your affiliation must be LLNL; 3) Note which authors are LLNL postdocs, and in what division & group; 4) Send full citation with all authors (no *et al*) and the title to Nathan (kugland1@llnl.gov).

PLS/Chemical Sciences/Forensic Science Center: **B. P. Mayer**, **R. L. F. Albo**, S. Hok, C. A. Valdez "NMR spectroscopic investigation of inclusion complexes between cyclodextrins and the neurotoxin tetramethylenedisulfotetramine" Mag. Res. Chem. DOI 10.1002/mrc.3803.

PLS/CMMD/Nanoscale Synthesis & Characterization Laboratory: S. O. Kucheyev, M. Stadermann, **S. J. Shin**, J. H. Satcher Jr., S. A. Gammon, S. A. Letts, T. van Buuren, A. V. Hamza, "Super-compressibility of ultralow-density nanoporous silica", Adv. Mater. 24 (6) 776-80 (2012).

PLS/CMMD/Quantum Simulations Group: **Brandon C. Wood**, Tadashi Ogitsu, and Eric Schwegler, "Local structural models of complex oxygen- and hydroxyl-rich GaP/InP(001) surfaces," J. Chem. Phys. 136, 064705 (2012).

PLS/Physics: **C Bellei**, J R Davies, P K Chauhan and Z Najmudin, "Coherent transition radiation in relativistic laser-solid interactions", Plasma Physics and Controlled Fusion, 54 035011

Meet the Postdoc Association Leadership Council

Abhinav Bhatele works towards exascale computing & visualization and loves riding his motorcycle

Hi, I am Abhinav and I joined the lab in June of 2011 as a postdoc in the Center for Applied Scientific Computing which is a division under Computation. I graduated with a PhD from the CS department at the University of Illinois at Urbana-Champaign. At LLNL, I am involved in two projects, Performance Analysis and Visualization at Exascale (PAVE) and the Center for Exascale Simulation of Advanced Reactors (CESAR). My work involves creating a bridge between computational scientists and visualization experts with an end goal of achieving better performance for application codes. I work with application developers to help detect performance problems through the use of visualization tools. In turn, I try to identify interesting computer science research issues in the areas of performance analysis, scaling bottleneck detection and developing analysis/visualization tools that can be generally useful for any parallel application. I routinely run on hundreds of thousands of processors at DOE/NSF supercomputing centers and create interesting visualizations and it is a lot of fun.

I have started helping the postdoc council with improving the look and content of the LLNL postdocs website (https://postdocs.llnl.gov). If you have any suggestions for the website about things you would like to be different or things that are missing, please drop me an email. I have also taken over from Cedric as the postdoc representative in the Institutional Postdoc Board (IPPB). So, if there are any burning issues that you would like me to raise at the monthly IPPB meetings, please come and talk to me.

I love riding my motorcycle, a 850 cc Ducati and also enjoy rollerblading/ longboarding. I am always looking for other people at the lab who are interested in doing either.

LLNL Postdoc Association Leadership Council

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